

IN THE CLAIMS:

31. (*Presently Amended*) A medical device comprising:


a substrate constructed and arranged for insertion into a patient; and

5 a plurality of monomer molecules directly graft polymerized onto the surface of the substrate from a medium having reversed phase properties from the substrate, in terms of hydrophilicity, and wherein the medium comprises a salting agent in an amount sufficient to induce a salting-out effect.

32. (*Original*) A medical device according to claim 31, wherein the substrate is selected

10 from the group consisting of guide wires, and catheters selected from the group consisting of PTCA catheters, cardiology catheters, central venous catheters, urinary catheters, drain catheters, and dialysis catheters.

33. (*Presently Amended*) A medical device according to claim 31, wherein the substrate

 defines has at least one lumen, at least a portion of which is coated with monomer molecules  
15 graft polymerized to the lumen surface.

34. (*Presently Amended*) A medical device according to claim 33, wherein the substrate

defines has a lumen having both interior and exterior surfaces ~~of a lumen~~, and at least a portion of both the interior and exterior of the lumen is coated with monomer molecules graft polymerized to the lumen surface.

20 35. (*Presently Amended*) A system for forming a graft polymerized medical device comprising:

a substrate constructed and arranged for insertion into a patient;

an initiator capable of initiating a graft polymerization reaction on the substrate, to generate reactive radical sites on the surface of the substrate; and

25 a composition comprising one or more monomers in a medium which has reversed phase properties compared to the substrate, in terms of hydrophilicity, wherein the polymer graft polymerized is grafted directly onto the substrate and wherein the medium further comprises a salting agent in an amount sufficient to induce a salting-out effect.